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TITLE: Four years after graduation: occupational therapists' work destinations and perceptions of preparedness for practice

RUNNING TITLE: Work destinations and practice preparation

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ABSTRACT

Objective: The present study sought to identify the work destinations of graduates and ascertain their perceived preparedness for practice from a regional occupational therapy program, which had been specifically developed to support the health requirements of northern Australians by having an emphasis on rural practice.

Design: Self-report questionnaires and semi-structured in-depth telephone interviews.

Participants: Graduates (*n*=15) from the first cohort of occupational therapists from James Cook University, Queensland.

Main outcome measure: The study enabled comparisons to be made between rural and urban based occupational therapists, while the semi-structured interviews provided a deeper understanding of participants' experiences regarding their preparation for practice.

Results: Demographic differences were noted between occupational therapists working in rural and urban settings. Rural therapists were predominantly younger and had worked in slightly more positions than their urban counterparts. The study also offered some insights into the value that therapists place on the subjects taught during their undergraduate occupational therapy training, and has highlighted the differences in perceptions between therapists with rural experience and those with urban experience regarding the subjects which best prepared them for practice. Generally rural therapists reported that all subjects included in the curriculum had equipped them well for practice.

Conclusions: Findings suggest the need to undertake further research to determine the actual nature of rural practice, the personal characteristics of rural graduates and the experiences of students whilst on rural clinical placements.

Keywords: occupational therapy, preparation for practice, rural practice, work destinations, undergraduate education

What is already known on the subject:

- Insufficient numbers of health professionals, including occupational therapists, in rural/remote Australia.
- Challenging work conditions in rural/remote practice.
- Rural/remote therapists often become generalists due to the nature of their practice, rather than adopting a specialised approach to practice.

What this study adds:

- Identifies the work destinations of graduates and the amount of time spent in their positions following graduation from a regional occupational therapy program, which has a rural focused curriculum.
- The differences in perceptions between therapists with rural experience and those with urban experience regarding the subjects that best prepared them for practice.

INTRODUCTION

People living in the rural and remote areas of Australia have a poorer level of health, and experience higher morbidity and mortality rates when compared with their metropolitan counterparts.[1,2] A contributing factor to this situation is the insufficient numbers of health professionals working in rural areas.[3]

According to the occupational therapy labour workforce data of 2003, only nine per cent of the total number of occupational therapists practising in Australia worked in non-metropolitan areas.[3] Whilst concerns surrounding the recruitment and retention of allied health professionals to rural/remote Australia are ongoing, work conditions in rural practice still remain challenging and far from ideal. Rural therapists often have to manage larger and more varied caseloads than their urban counterparts,[4,5] undertake administrative and management roles,[6] and regularly travel long distances.[1] All of these challenges occur whilst working in an environment where there is limited professional support,[1,4,7,8,9] reduced access to resources,[4,10] and a lack of continuing professional development opportunities.[5,9,11]

Due to the nature of rural practice, therapists are often required to have the capability to provide effective services across the lifespan to clients with a wide variety of diagnoses and diverse needs, and as such, acquire generalist practice skills.[4, 5] Consequently, when therapists embark on a career in rural settings, they can often find themselves inadequately prepared for such challenges.[8, 12]

Undergraduate programs have the opportunity to mitigate these challenges; however there is minimal literature available regarding the adequacy of undergraduate education and its role in preparing occupational therapy graduates for practice.[13,14] Other

disciplines have evaluated their programs; specifically identifying that rural exposure assists graduates in making an informed career choice.[15,16,17]

The present study was conducted to identify the work destinations of the first cohort of graduates from the James Cook University (JCU) occupational therapy program, in addition to ascertaining their perceived preparedness for practice. This program was developed to facilitate graduate competence in generalist clinical skills (focusing on lifespan issues, rather than teaching clinical specialties), offering rural placements, and the inclusion of specific rural health content in the curricula.[14]

METHOD

Ethics approval to undertake this study was sought and obtained from the James Cook University Human Research Ethics Committee (H2161).

Participants

A purposive sampling procedure was employed when graduates from the 2002 program (*n*=43) were invited to participate in this study via receipt of a mailed questionnaire. Fourteen females and one male (with an age range of 25-50 years) completed and returned their questionnaires, giving an overall response rate of approximately 35%. Ten of the 15 participants consented to a telephone interview and an attempt was made to contact all 10 participants; however, only six of these were available.

Data collection and analysis

Data collection involved the use of a questionnaire, (piloted with four occupational therapists and one physiotherapist, all with extensive rural /remote clinical experience) to obtain demographic and work destination information. Additionally,

participants were asked to identify the undergraduate subjects which had best prepared them for practice. These data were analysed manually to obtain frequencies and percentages.

A semi-structured telephone interview, which mirrored themes in the questionnaire, enabled an in-depth exploration of participants' experiences. Manual thematic analysis was undertaken, with transcripts being read numerous times to get an overall sense of the data as well as to identify key themes. Thematic coding and categorisation occurred where all data relevant to each identified theme was examined using constant comparison. This involved the checking and comparison of each item with the rest of the data to establish analytical themes[18]. Triangulation was achieved by utilising field notes, semi-structured interviews and an independent colleague check.

RESULTS

Demographic characteristics and work destinations

The study sample comprised 14 females and one male with a mean age of 30.9 years, in a range between 25 and 50 years. Nine participants were currently working in urban centres; five were employed in rural/remote areas with one working overseas. An urban centre (as defined by the Rural, Remote and Metropolitan Area classification) has a population of 100,000 or more; a rural area as having a population of 99,999 to approximately 10,000, whilst a remote area is defined as having a population of approximately 5,000[19]. Since graduation, eight of 15 participants (53%) had worked at some stage in a rural/remote location. Hereafter, therapists with rural/remote experience will be referred to as 'rural' therapists, and those with urban experience only (n=7) will be referred to as 'urban' therapists.

Rural therapists were predominantly younger than their urban counterparts (mean age of 25.8 years and 38.5 years respectively) and had worked on average in 3.1 positions since graduation with a mean time of 17 months per position. Urban therapists on the other hand, had worked on average in 2.1 positions since graduation, with an average of 23 months in each position. Table 1 provides a tabular summary of participant's work locations since graduation.

Insert Table 1 about here

Therapists' perceptions of subjects that prepared them for practice

Overall, the fieldwork subjects ('rural and urban practice 1 and 2' and 'advanced rural or urban practice') were most frequently perceived to have best prepared therapists for actual practice. Some rural therapists (5 of 8, 62.5%) indicated that their rural placement had ultimately influenced them to work rurally.

> All of my rural placements influenced me [to work rurally]… I love rural clients and rural communities.
>
> I felt positive about my 14 week placement and the variety of work possible in a rural area.

However all of the urban therapists (7 of 7, 100%) reported that their student experiences had deterred them from seeking rural employment.

> [Rural placements] made my decision easy not to work in a rural area. I suppose I had other influences, but I was never ever going to work in a rural area.
>
> I know one of the girls in the OT department in [remote location] hospital, she *was* the OT department. She was pretty new and she was doing everything with minimal supervision. I know that I couldn't really do that.

Other subjects perceived to have best prepared participants included: 'rural and remote primary and public health care', 'health promotion for health professionals' and

'management and organisational skills' (see Figure 1). Interestingly rural therapists appeared to perceive that all subjects within the curriculum were useful in preparing them for the workforce.

> I liked the rural and remote focus, and problem-based learning.
>
> Probably the health promotion subjects were the best.
>
> I certainly appreciated the training we had in the rural practice subjects. I felt really comfortable taking any rural position.

Conversely their urban counterparts did not share these perceptions of the curriculum.

> They covered indigenous issues a lot. What I thought that they really only touched on briefly was multi-culturalism, and they did not actually talk about other ethnic groups.
>
> We weren't very strong in anatomy at all. It needs to be reinforced over the whole four years.
>
> Two research subjects, two lots of rural and remote health, two health promotion subjects. I think one of each of those would have been sufficient.

Both rural and urban participants identified areas in the curriculum where improvement was required.

> Not enough time spent on functional anatomy on cadavers or hands-on activities like splinting, wheelchair prescription etc.
>
> There is a need for a bit more general mental health stuff, considering there are so many OT mental health positions not filled, and there is such a need for OTs in mental health.
>
> I think of all the things when I first graduated, the thing that I wished I'd done and had more practice at is caseload management and time management. 'How [do you] prioritise patients over other patients…?'

Insert Figure 1 about here

DISCUSSION

The JCU occupational therapy curriculum was designed to focus on rural health issues and it is interesting to note its early successes with over half of the respondents (8 of 15 -53%) from the first cohort reporting having rural/remote work experiences. Orpin

and Gabriel (2005)[17] suggested that at the commencement of training most undergraduates possess a well developed sense regarding their career path, along with a preferred context for practice. Indeed, therapists may actually have a pre-disposition to being a rural practitioner, and personal characteristics may have a direct influence on the choice of practice location.[20, 21]

Analysis identified that the rural therapists were almost 13 years younger than the urban therapists. This result is similar to Lannin and Longland's (2003, p.185)[8] findings that rural therapists tended to be "younger, recently graduated, females, employed full time and often as sole practitioners." In contrast Strasser, Hays, Kamien and Carson (2000)[22] reported that the rural/remote medical workforce in Queensland, South Australia and Victoria appeared to be ageing (mean age of 37-45 years, 43-45 years and 44-47 years respectively).

Most rural therapists in this study perceived that their rural placement had attracted them to work rurally, whilst all urban therapists felt their rural fieldwork placement actually deterred them from practising in such a context. Clearly further research is needed regarding the factors deterring students from pursuing a rural career. Interestingly, Orpin and Gabriel (2005)[17] found that the rural content of three Australian undergraduate health programs discouraged the majority of participants from pursuing rural careers. Conversely, Welch, McKenna and Bock (1992)[6] reported that those students who undertake a rural placement are able to realistically evaluate their ability to work in such a context.

In this study rural therapists tended to have worked in slightly more positions than their urban counterparts. Several authors have reported that the professional challenges

experienced by health professionals in rural practice often outweigh the incentives for them to stay in their positions.[5, 23] Furthermore Lannin and Longland (2003)[8] suggested that the high turnover of rural occupational therapists was linked to the unsuitability of new graduates for rural practice because of the diversity of experience and skills required.

The fieldwork subjects in the curriculum were the most frequently perceived to have best prepared graduates for actual practice following graduation. In occupational therapy education, fieldwork has been identified as having the most important influence on choice of clinical practice area.[24] Wilkinson and Laurence (2002)[25] also identified that rural placements were a key strategy many undergraduate programs use to increase exposure to rural practice. 'Fieldwork provides the student with a safe and yet real life setting in which academic course work and knowledge can be applied, practiced and integrated' (Mulholland & Derdall, 2004, p. 228).[21]

Other subjects perceived to have been useful in preparing for practice were 'rural and remote primary and public health care', 'health promotion for health professionals' and 'health education and promotion'. Devine's (2006)[14] results, where recently graduated rural occupational therapists were surveyed about their preparation for practice, are similar to those found in this study, with the 'rural and remote primary and public health care' and 'health promotion' subjects being seen as valuable.

The rural therapists in this study appeared to perceive all subjects within the curriculum useful in preparing them for the workforce, compared with their urban counterparts. This is possibly due to the necessity of rural therapists requiring 'a broad knowledge base in order to provide effective services in a rural health setting' (p.59).[26] Participants in Mills and Millsteed's study (2002)[5] commented that the scope of rural

practice was often wider than metropolitan practice as there was no possibility of sharing a caseload or referring to another therapist.

Study Limitations

Study limitations include a small sample size and potential for selection and recall bias. While the results need to be viewed with some caution they do highlight areas for potential exploration including the characteristics of rural student clinical fieldwork placement experiences as barriers or facilitators to career destinations and the personal characteristics of students.

CONCLUSION AND RECOMMENDATIONS

The present study has identified the work destinations and perceptions of preparedness for practice of the first cohort of graduates from an occupational therapy program. It has also offered some insights into the value that therapists place on the subjects taught during their undergraduate training, and has highlighted the differences in perceptions between therapists with rural experience and those with urban experience regarding the subjects which best prepared them for practice. Findings from this study emphasise the need for further research to identify the actual nature of rural practice, the personal characteristics of rural bound graduates and the experience of students whilst on rural clinical placements. An increased understanding of the factors which attract, retain and repel occupational therapists to and from rural practice will continue to be important so long as there are allied health workforce shortages and health differentials in rural/regional Australia.

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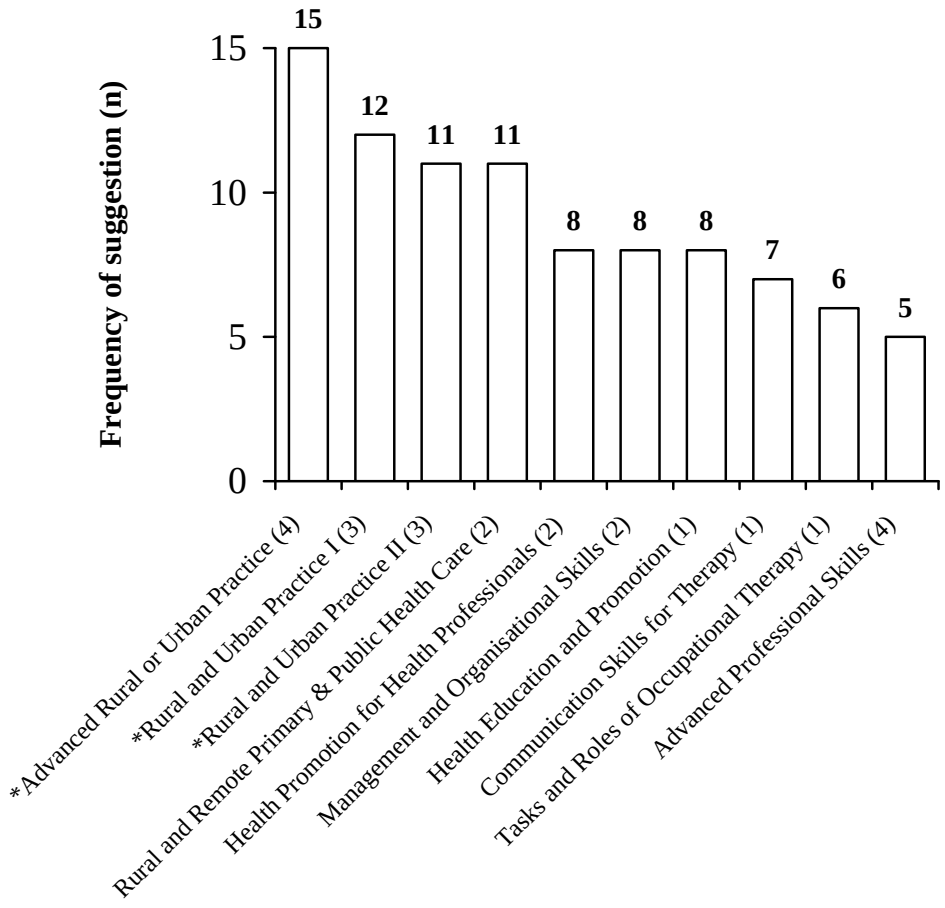
FIGURE 1: Top 10 subjects perceived to have best prepared graduates for practice *(multiple subjects could be chosen)*



* denotes fieldwork subjects *(year of course that subject was offered)*

Table 1 - Demographic characteristics of participants (*n*=15)

Participant	Gender	Rural/ Remote fieldwork placement	Work locations since graduation *(Based on RRMA Classification)*			
			First position ***(months in position)***	**Second position** ***(months in position)***	**Third position** ***(months in position)***	**Fourth position** ***(months in position)***
1	M	Yes	Rural QLD *(3)*	*Urban QLD *(42)*		
2	F	Yes	Urban QLD *(9)*	Urban QLD *(3)*	*Urban QLD *(36)*	
3	F	Yes	Urban QLD *(12)*	Urban QLD *(3)*	Urban QLD *(24)*	*Urban QLD *(10)*
4	F	No	Remote QLD *(12)*	Remote QLD *(12)*	Urban QLD *(6)*	*Urban WA *(13)*
5	F	Yes	Rural QLD *(9)*	*Rural QLD *(36)*		
6	F	Yes	*Urban QLD *(48)*			
7	F	No	Remote QLD *(24)*	*Remote QLD *(24)*		
8	F	Yes	Urban QLD *(15)*	Overseas *(3)*	Overseas *(8)*	*Urban QLD *(8)*
9	F	Yes	Rural QLD *(18)*	Rural NSW *(12)*	*Rural NSW *(14)*	
10	F	Yes	Urban QLD *(48)*	*Urban QLD *(6)*		
11	F	Yes	Remote QLD *(18)*	Urban VIC *(19)*	*Urban VIC *(16)*	
12	F	Yes	*Urban QLD *(48)*			
13	F	Yes	Rural QLD *(18)*	*Overseas *(30)*		
14	F	Yes	Rural QLD *(6)*	Rural QLD *(9)*	Rural QLD *(30)*	*Rural QLD *(9)*
15	F	No	Urban QLD *(12)*	*Urban QLD *(32)*		

* Denotes current position at time of data collection